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## Acute Coronary Syndromes

## IMPACT OF CORONARY ARTERY SPASM ON FIVE-YEARS CLINICAL OUTCOMES: A PROPENSITY SCORE-MATCHED ANALYSIS

Poster Contributions

Hall C

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Session Title: Acute Coronary Syndromes: Biologic Considerations

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Authors: SangHo Park, Seung-Woon Rha, Taehoon Ahn, Won Yu Kang, Wonyong Shin, Dongkyu Jin, Byoung Geol Choi, Cheol Ung Choi, Chang Gyu Park, Hong-Seog Seo, Dong Joo Oh, Soonchunhyang University Cheonan Hospital, Cheonan, South Korea, Cardiovascular Center, Korea University Guro Hospital, Seoul, South Korea

**Background:** It is little known as long-term clinical outcomes for coronary artery spasm.

**Methods:** A total 1118 patients (pts) undergoing coronary angiography with acetylcholine provocation test from Nov 2004 to Oct 2010 from prospective spasm registry of Cardiovascular Center of Korea University Guro Hospital were enrolled. The follow-up duration was 5-year. The definition of positive coronary spasm test was defined as coronary vasospasm of more than 70%. After propensity score matching, the patient number of both group was 421.

**Results:** After Propensity score matching, there was no difference in mortality, cardiac death, myocardial infarction except recurrent chest pain requiring repeat coronary angiography that had the higher incidence in positive CAS group ( $p=0.003$ ) (Table). Also, in proportional hazard cox-regression analysis adjusted by co-variables such as age, gender, hypertension, diabetes, dyslipidemia, current smokers, current alcoholics, myocardial bridge, positive CAS was associated with the increase of incidence of recurrent chest pain (HR, 1.7; 95% CI, 1.012-2.612;  $p=0.022$ ).

**Conclusions:** In our study, coronary artery spasm didn't increase the incidence of mortality, cardiac death, and myocardial death except recurrent chest pain during 5-year clinical follow-up period.

Variable. N (%)	Entire Patients				Propensity Score-Matched Patients			
	Total (n=1118)	CAS (+) (n=621)	CAS (-) (n=497)	P Value	Total (n=842)	CAS (+) (n=421)	CAS (-) (n=421)	P Value
Mortality	6 (0.5)	6 (0.9)	0 (0.0)	0.037	4 (0.4)	4 (0.9)	0 (0.0)	0.124
Cardiac death	2 (0.1)	2 (0.3)	0 (0.0)	0.506	1 (0.1)	1 (0.2)	0 (0.0)	NS
Myocardial infarction	9 (0.8)	7 (1.1)	2 (0.4)	0.313	8 (0.9)	6 (1.4)	2 (0.4)	0.287
Recurrent chest pain	102 (9.1)	70 (11.2)	32 (6.4)	0.005	81 (9.6)	53 (12.5)	28 (6.6)	0.003

Table. Comparison for clinical outcomes during 5-year follow-up period between CAS positive and negative group; there was no difference in mortality, cardiac death, myocardial infarction except recurrent chest pain requiring repeat coronary angiography that had the higher incidence in positive coronary artery spasm group ( $p=0.003$ ).